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Docket No.: 52-026

ND-23-0198 10 CFR 52.99(c)(1)

U.S. Nuclear Regulatory Commission Document Control Desk Washington, DC 20555-0001

Southern Nuclear Operating Company
Vogtle Electric Generating Plant Unit 4
ITAAC Closure Notification on Completion of ITAAC 2.6.02.02b [Index Number 594]

#### Ladies and Gentlemen:

In accordance with 10 CFR 52.99(c)(1), the purpose of this letter is to notify the Nuclear Regulatory Commission (NRC) of the completion of Vogtle Electric Generating Plant (VEGP) Unit 4 Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) Item 2.6.02.02b [Index Number 594]. This ITAAC confirms that EDS load group 1, 2, 3, and 4 batteries can supply the corresponding dc switchboard bus load for a period of 2 hours without recharging. The closure process for this ITAAC is based on guidance described in Nuclear Energy Institute (NEI) 08-01, "Industry Guideline for the ITAAC Closure Process under 10 CFR Part 52," which was endorsed by the NRC in Regulatory Guide 1.215.

This letter contains no new NRC regulatory commitments. Southern Nuclear Operating Company (SNC) request NRC staff confirmation of this determination and publication of the required notice in the Federal Register per 10 CFR 52.99.

If there are any questions, please contact Kelli Roberts at 706-848-6991.

Respectfully submitted,

Jamie M. Coleman

Regulatory Affairs Director Vogtle 3 & 4

Enclosure: Vogtle Electric Generating Plant (VEGP) Unit 4

Completion of ITAAC 2.6.02.02b [Index Number 594]

JMC/KIK/sfr

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cc:

Regional Administrator, Region II Director, Office of Nuclear Reactor Regulation (NRR)

Director, Vogtle Project Office NRR Senior Resident Inspector – Vogtle 3 & 4

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# Southern Nuclear Operating Company ND-23-0198

## **Enclosure**

Vogtle Electric Generating Plant (VEGP) Unit 4 Completion of ITAAC 2.6.02.02b [Index Number 594] U.S. Nuclear Regulatory Commission ND-23-0198 Enclosure Page 2 of 4

#### **ITAAC Statement**

### **Design Commitment:**

2.b) Each EDS load group 1, 2, 3, and 4 battery supplies the corresponding dc switchboard bus load for a period of 2 hours without recharging.

#### Inspections, Tests, Analyses:

Testing of each as-built battery will be performed by applying a simulated or real load, or a combination of simulated or real loads. The test will be conducted on a battery that has been fully charged and has been connected to a battery charger maintained at 135 ±1 V for a period of no less than 24 hours prior to the test.

#### Acceptance Criteria:

The battery terminal voltage is greater than or equal to 105 V after a period of no less than 2 hours, with an equivalent load greater than 850 amps.

#### **ITAAC Determination Basis**

Testing was performed in accordance with Unit 4 component test work orders documented in Reference 1 to verify that each Non-Class 1E direct current (dc) and Uninterruptible Power Supply System (EDS) load group 1, 2, 3, and 4 battery supplies the corresponding dc switchboard bus load for a period of 2 hours without recharging.

A battery service test, as defined in Institute of Electrical and Electronics Engineers (IEEE) Standard 450-1995, was performed using a load bank to apply a load on the battery that results in a discharge current greater than 850 amps. The component test is performed on each fully charged as-built EDS battery that has been connected to a charger maintained at 135 ±1 V for a period of no less than 24 hours prior to the test. The EDS battery is disconnected from the battery charger and a load bank is then connected to the output of the battery, adjusted to a discharge current greater than 850 amps. Discharge current and battery terminal voltage at the start of the test and upon completion of the 2-hour test from the component test package work orders are included in Reference 1. The EDS battery discharge current and terminal voltage measurements are summarized in Attachment A and demonstrate that each EDS battery meets the acceptance criteria.

The Unit 4 component test results confirm the battery terminal voltage is greater than or equal to 105 V after a period of no less than 2 hours with an equivalent load greater than 850 amps.

Reference 1 is available for NRC inspection as part of the Unit 4 ITAAC 2.6.02.02b Completion Package (Reference 2).

#### **ITAAC Finding Review**

In accordance with plant procedures for ITAAC completion, Southern Nuclear Operating Company (SNC) performed a review of all ITAAC findings pertaining to the subject ITAAC and associated corrective actions. This review found there were no relevant findings associated with this ITAAC. The review is documented in the ITAAC Completion Package (Reference 2) and is available for NRC review.

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## **ITAAC Completion Statement**

Based on the above information, SNC hereby notifies the NRC that ITAAC 2.6.02.02b was performed for VEGP Unit 4 and that the prescribed acceptance criteria were met.

Systems, structures, and components verified as part of this ITAAC are being maintained in their as-designed, ITAAC compliant condition in accordance with approved plant programs and procedures.

## References (available for NRC inspection)

- 1. SV4-EDS-ITR-800594, Rev. 0, "ITAAC Technical Report, Unit 4 Test Results of Non Class 1E DC and UPS System: ITAAC 2.6.02.02b [NRC Index Number 594]"
- 2. 2.6.02.02b-U4-CP-Rev0, ITAAC Completion Package

## Attachment A

# System: Non-Class 1E dc and Uninterruptible Power Supply System

Unit	Component Name*	Tag No.*	Pre-test Voltage & Time	Test Discharge Current, Voltage & Time at Start	Test Discharge Current, Voltage & Time at End (>2 Hours)
4	Load Group 1 Battery	EDS1-DB-1	<u>134</u> V >24 hrs	> <u>1255</u> Amp / <u>120.4</u> V 09:28:06 hrs	> <u>850</u> Amp / <u>112.4</u> V 11:28:06 hrs
4	Load Group 2 Battery	EDS2-DB-1	<u>134</u> V >24 hrs	> <u>1255</u> Amp / <u>120.3</u> V 14:16:35 hrs	> <u>850</u> Amp / <u>112.8</u> V 16:16:35 hrs
4	Load Group 3 Battery	EDS3-DB-1	134 V >24 hrs	> <u>973</u> Amp / <u>122.2</u> V 15:17:47 hrs	> <u>850</u> Amp / <u>112.9</u> V 17:17:47 hrs
4	Load Group 4 Battery	EDS4-DB-1	134_V >24 hrs	> <u>973</u> Amp / <u>122.2</u> V 06:57:43 hrs	> <u>850</u> Amp / <u>112.5</u> V 08:57:43 hrs